state of the patients by putting them into a better hygienic condition. Ulcerated cancer in other regions may be treated with similar success by lotions or injections. In ozæna and in fetor of the breath the permanganate has been found very useful, and Dr. Dumenez quotes from Dr. Oliffe a case of ozæna thus successfully treated. In the case of morbid secretions it appears to remove from these liquids their septic character, and thus to improve the condition of wounds from which they may emanate. It never produces any bad effect, and when applied on mucous membranes, whatever the dose may be, it produces no pain or irritation. Dr. Dumenez passes in review the various substances which have from time to time been employed as disinfectants, such as acids, chlorine, and the chlorides, pyrogenic oils like that of coal-tar, &c., and he gives the preference to the permanganate of potash over them all.—*British and Foreign Medico-Chirurgical Review*, Oct. 1866, from *Bull. Gén. de Thérap.*, Nov. 30, 1865.

MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

12. *Digitalis in the Treatment of Mania, Recent and Chronic.*—Dr. S. W. D. WILLIAMS, in a paper with nineteen illustrative cases, published in the *Journal of Mental Science* (January, 1866), confirms the opinion of Dr. Robertson as to the efficacy of digitalis in certain forms of mania. The cases already published by Dr. Robertson tend to show the almost specific action of digitalis in allaying the excitement of impending general paresis; but the paper of Dr. Williams is confined to illustrating the use of the drug in the excitement accompanying mania in its acute and chronic forms, and also when complicated with epilepsy. The results of the cases show that digitalis seems to possess a marked power of arresting cerebral excitement, of whatever nature it may be; but it is also evident that, except as allaying excitement it has no further curative powers. Dr. Williams considers its efficacy in chronic mania and epilepsy to be simply due to the fact that it lessens the action of the heart, thus diminishing the flow of blood to the brain, and offering less food for the excitement to feed on. This view is rendered more probable from the fact that digitalis never exerts any beneficial influence until after the pulse has been affected; and Dr. Williams has moreover observed that when the system has become used to the potency of the drug, the return of the pulse to its former rate is accompanied by a corresponding exacerbation of excitement, which can only be allayed by increasing the dose. Although it might be supposed that only strong, healthy constitutions would be able to bear the effects of digitalis, this view is incorrect, for patients weakened by disease or exhausted by excitement bear its administration in general better than those who are stronger; and this fact explains its efficacy in general paresis, which is essentially a disease of debility. Dr. Robertson advises the use of doses varying from ʒss to ʒj three or four times a day, under which treatment an excited patient may perhaps at first become more excited than before; but if the medicine is continued, it will be found that the excitement gradually subsides, and the pulse becomes intermittent. When this is the case, the digitalis should be omitted until the pulse has resumed its normal rhythm. As regards epileptics, Dr. Williams thinks that digitalis possesses a certain amount of preventive power, and is able not only to ward off the attacks of violence, but to lessen their force when they occur. One of the patients whose case is recorded by Dr. Williams had taken ʒss of digitalis (tincture) twice daily for many months and with marked benefit, for one of the epileptic relapses passed off without the slightest manifestation of violence. In some cases where digitalis has after a time lost its power, or has caused sickness and vomiting, Dr. Robertson combines it with morphia, tincture of hyoscyamus, and chloric ether. The influence of digitalis on the heart being generally admitted, the question is whether it is a stimulant or depressant; and Dr. Williams inclines to the belief that it is a decided stimulant. The general conclusions drawn by Dr. Williams

as to the use of digitalis in insanity are that it is a valuable sedative both in recent and chronic mania, and when these forms of disease are complicated with general paresis and with epilepsy; that the average dose of the tincture is ʒss to ʒj, to be continued even for many months, unless it causes intermittence of the pulse, when it must be immediately discontinued; that weakness of the circulation is no indication against its employment, but the reverse; and that in certain cases it may be advantageously combined with chloric ether, morphia, and prussic acid.

—

13. *Capsicum in Delirium Tremens.*—Since our last notice [see this Journal for July, 1866, p. 241] of the employment of this simple and efficacious plan of treatment, some well-marked cases have occurred in Dr. LYONS's practice. In one instance, the patient, a tavern-waiter, of chronically intemperate habits, was admitted to the Whitworth Hospital in the first stage of this morbid condition. The patient exhibited tremor in almost all the muscles of the body, chilliness, debility, sleeplessness, foul tongue, severe and general uneasiness, but there was a total absence of illusions, horrors, or delirium to any degree. He got a single dose of capsicum, twenty grains in a bolus, after which he slept and fully convalesced, the disease having been thus peremptorily cut short. Dr. Lyons remarks on the great importance of this early phase of the disease being recognized and promptly treated. The patient is in that condition in which he may be by but slight further indiscretion plunged suddenly into all the horrors and moral degradation of the state of fully developed delirium tremens, with all its consequent loss of character with others, and loss to the patient himself of that last barrier against utter abandonment, the sense of shame and remorse. For not alone does the first occurrence of delirium tremens brand the sufferer with the character of an all but irretrievable dipsomaniac, but the fact that he has passed this moral Rubicon, in the vast majority of cases deprives the patient of all stimulus to self-control, and under the demoralizing feeling that there is nothing further to be risked, his steps henceforward ever tend downwards and from bad lead on to worse.

As Dr. Lyons observes, a brief but variable period often precedes the fully developed attack of delirium tremens, especially in first cases, in which the patient presents anomalous symptoms unintelligible to himself, and not always read aright by his attendant. This stage is in some patients marked by the occurrence of tremor, sleeplessness, and general distress and anxiety, without a trace of delirium. In other instances slight illusions prevail without tremor, from which the patient can by an effort arouse himself, and under strong self-directed exertion of the will even command his faculties for a time, and pursue avocations of business, to break down, it may be, hopelessly, a few hours subsequently, if his condition is neglected, misunderstood, or mistreated. Under these circumstances, the treatment by capsicum comes in very opportunely, and by its employment we may, as in the case just cited, cut short the disease, and so save the patient from the consequences of his imprudence, and possibly restore him to a reformed life. Another case well illustrates the success of this drug when opium had completely failed to alleviate the symptoms, and seemed on the contrary in many respects to aggravate the patient's condition. The case was that of an individual who had taken six grains of opium within a period of two or three days without sleep being procured, or any relief to the illusions, tremor, and distress under which the patient laboured. After a twenty-grain dose of capsicum in bolus, profound and refreshing sleep for twelve hours was induced, and the patient awoke conscious and restored. In an almost precisely similar instance occurring about the same period a thirty-grain dose of the drug had to be given a second time before full relief was procured. In one or two instances of individuals of confirmed and extremely intemperate habits it was found necessary to repeat the dose some three or four times.

As to the physiological action of the remedy, Dr. Lyons's explanation is that already given in a former communication—namely, that it produces a powerful stimulant and sedative influence by its direct action on the gastric filaments of the vagi. Slight uneasiness in the stomach has been complained of in one instance only after its use, and in two instances somewhat smart purgation was noticed, but without any evidence of intestinal or other irritation.

As at present employed, the drug is administered in bolus made up with honey of roses; but Dr. Lyons suggests the feasibility of its being conveyed to the stomach in the more agreeable form of a capsule.

As capsicum belongs to the great order of the Solanaceæ, Dr. Lyons suggests the possibility of its containing a narcotic principle hitherto undiscovered. He has referred this question for further elucidation to his distinguished friend, Mons. Gages, curator of the Museum of Irish Industry, a chemist of great eminence.—*Medical Press and Circular*, June 20, 1866.

14. *Digitalis in Large Doses in the Treatment of Pneumonia.* By Dr. Gallard.—Among the numerous remedies which have been proposed and are now employed in the treatment of pneumonia, digitalis appears to be particularly indicated in cases where the febrile reaction seems to require the employment of antiphlogistics; but where the debility of the patient, and especially the state of depression into which he has fallen from the commencement of the disease would appear, on the other hand, to require the use of stimulants and tonics. These cases are not rare in practice, and they correspond pretty accurately to the form of pulmonary inflammation described under the name of *typhoid pneumonia*, and it is in such that Dr. Gallard has found digitalis most beneficial. He relates a case of a young man treated at the Hôpital de la Pitié with success by the use of digitalis. This drug, however, was not employed alone; but Dr. Gallard calls attention to the fact that the previous treatment by blistering and tartarized antimony produced no effect, and was discontinued because the patient was unable to bear it, owing to his weakness and depression. The digitalis was given in powders, each containing five centigrammes, to be taken every two hours. In twenty-four hours the pulse was reduced twenty beats, and in forty-eight hours forty-eight beats, having been originally one hundred and eight, and being reduced to sixty. The improvement in the local symptoms soon followed that of the general symptoms, and the patient, who was considered unable to resist an energetic antiphlogistic treatment, recovered in less than a week from a most alarming attack.—*British and Foreign Medico-Chirurgical Review*, Oct. 1866, from *Bulletin Général de Thérapeutique*, March 30, 1866.

15. *Treatment of Unabsorbed Pneumonic Deposits.*—Dr. Andrew Clark, in a paper read before the Medical Society of London (Oct. 15, 1866), began by defining the conditions of which he spoke, and showed that, though not uncommon, they were often overlooked. He then proceeded to discuss the signs and symptoms by which the presence of these deposits was to be recognized, and the difficulties incident to a correct diagnosis. The destiny of the deposits was next passed in review: he said they were absorbed; or they became contracted, hard, and tantamount to lumps of yellow tubercle; or they broke up into cavities, the case being then clinically undistinguishable from ordinary phthisis; or they issued in rare cases in the development of cancerous disease. Dr. Clark next told the history of thirteen cases which had been purposely left without treatment, in order to illustrate the natural history of the deposits, and show the relative proportions in which they became absorbed, indurated, or broken up into cavities. In these thirteen cases the deposits disappeared within five months in four; remained little altered at the end of two years in six; and went on to softening and fatal destruction of lung within little more than a year in three. The author then considered the conditions which hastened or hindered recovery, and pointed out their bearing upon treatment. He next discussed whether, above this natural treatment, art possessed other resources by which the number of recoveries might be increased and that of untoward issues diminished; and he said that he was able by his experiments to answer the question in the affirmative. His experiments were conducted exclusively on men, and all were placed as nearly as possible under the same hygienic rules. The objects of these rules were to raise the general health to its highest point, to promote the thorough moulting of the textures, and to foster the physiological conditions favourable to active absorption and excretion. The patients were ordered

to sponge every evening with tepid water; to take daily three substantial meals, in which meat, bread, milk, and eggs formed the leading constituents; to consume in the course of the day from three to four pints of fluid, of which one should be malt; to have plenty of out-door exercise, fresh air, and recreation; to exercise the lungs frequently by means of deep inspirations; to clothe warmly; to avoid hot crowded rooms, damp places, draughts of cold air, and worry of every kind. With these directions, common to all, the cases were treated on three different plans—the mercurial, the acid tonic, and the alkaline tonic. The mercurial plan consisted of counter-irritation and bringing the patient slowly under the influence of mercury by means of gray powder and ipecacuan; the acid tonic plan in giving quinia, or quinia and iron, with acids; the alkaline tonic plan, first, in the administration of bark, iodide of potassium, bicarbonate of potassium, and ammonia till the urine became alkaline, when this mixture was replaced by five-drop doses of the arseniate of soda; and second, in the inhalation twice a day of sprays of weak solutions of bicarbonate, chlorate, or nitrate of potash. When there was irritability of stomach bromide of potassium replaced the iodide; and when there was anæmia calumba or quassia was substituted for bark, and five to ten grains of citrate of iron added to each dose. The author then contrasted the statistical results of the thirteen cases left to themselves with sixteen cases treated on the mercurial plan, seventeen on the tonic, and nineteen on the alkaline, and drew from them the following among other conclusions: "That art might be made of real service to nature in the recovery of these cases; that the mercurial plan was by far the worst, and the alkaline plan decidedly the best, method of treating them. The author explained the reserve with which we should adopt rules of treatment based upon mere statistical returns, and pointed out how important an element in the confirmation of their accuracy was the moral conviction of the practitioner begotten by multitudes of impressions, and growing up through multitudes of corrections and limitations. He concluded by saying that, as art had proved to be of real help to nature in the removal of pneumonic deposits, it was our duty, so long as the extent to which that help might go remained uncertain, to endeavour to determine it by therapeutical experiment.

In the discussion which ensued, Dr. Palfrey, Dr. Camps, Dr. Symes Thompson, Dr. Sansom, Dr. Broadbent, Mr. Hinton, Dr. Routh, Mr. Barnes, and Dr. Hare took part. It was generally considered that the statistics of cases adduced by Dr. Clark were conclusive in showing that pneumonic phthisis was not so formidable and fatal a disease as had been formerly supposed, and that the system of supporting the patient was that indicated.—*Lancet*, Oct. 20, 1866.

16. *Detection of Lung-tissue in the Expectoration of Persons affected with Phthisis.*—Dr. SAMUEL FENWICK read a paper on this subject before the Royal Medical and Chirurgical Society (June 26), in which he gives the results obtained from the examination by the microscope of the expectoration of 100 real or suspected cases of phthisis. The plan hitherto recommended of searching for pulmonary tissue in sputum has been to spread it on a flat surface, and to pick out of it with needles any portions that might appear likely to contain elastic fibre. He has, on the contrary, been in the habit of liquefying the expectoration by boiling it with a solution of pure soda, and then placing the fluid in a conical shaped glass, when every particle of elastic tissue falls to the bottom, and can be removed and placed under the microscope, as is done in the examination of urinary deposits. In this way he has easily found $\frac{1}{100}$ part of a grain of pulmonary structure after it had been mixed in bronchial mucus; and he calculates that $\frac{1}{4000}$ to $\frac{1}{5000}$ part of a grain may be detected in any expectoration that may contain it. In 13 out of 23 cases in which tubercle was suspected to be in the first stage, lung-tissue was found in the sputum. In 7 of the 23 cases, there was no physical sign of tubercle, but its existence in the lung was suspected from general symptoms only; and in the expectoration from these there was no pulmonary tissue. In 16 cases there were stethoscopic signs leading to the belief that tubercle was present; and in 13 of them elastic fibre was found in the mucus coughed up. There were 24 cases in which auscultation and percussion indicated softening of tubercle in the lungs, and in all pulmonary tissue

was present in the sputa. In 15 the physical signs were of a doubtful nature, and 7 of these presented microscopic evidence of ulceration of the lungs. In 35 cases the stethoscope indicated cavities, and in all these there were fragments of lung-tissue in the expectoration. In 2 cases the author had diagnosed enlarged bronchial tubes, and in neither of them was there any appearance of elastic fibre in the sputum. In 69 cases he counted the numbers and size of the fragments of lung expelled. In one specimen, coughed up in twelve hours, 800 fragments were found; and often 50 or 60 fragments were detected, where, from the stethoscopic signs alone, no great destruction of lung could have been anticipated. The proportion of bronchial tubes the author found to be least in the stage of softening, and greatest where the stethoscope indicated cavities. The greatest proportion of fragments of single air-cells was found in the first stage, and the largest proportion of large fragments of lung where cavities existed. The author concluded his paper by giving a number of practical directions as to the best method of conducting the examination of the expectoration, in order to find with quickness and certainty and pulmonary tissue that may be present.—*Med. Times and Gaz.*, Sept. 29th, 1866.

---

17. *Consumption treated with Pancreatic Emulsion of Solid Fat.*—Dr. Horace Dobell reports (*Lancet*, Nov. 17. 1866) the results of 187 carefully watched cases, and the sum of the whole series, which has extended over about three years, is as follows:—

In the first stage (advanced), 45 cases; second stage, 69; third stage, 73. Condition on discharge measured by general symptoms: Improved. 158; stationary, 8; worse, 18; not noted, 3. Measured by physical signs: Improved, 118; stationary, 46; worse, 18; not noted, 5.

Emulsion agreed, 180; disagreed, 7.

Cod-liver oil agreed, 75; disagreed, 98; not tried, 14.

---

18. *Hydatid of the Liver, treated successfully by the Injection of the Extract of Male Fern into the Cyst.*—Dr. F. W. Pavy communicated the following case of this to the Royal Med. and Chirurgical Society, (June 26). Harriet V., a woman of pretty healthy appearance, aged twenty-one, admitted into Mary Ward under the care of Dr. Pavy, October 4, 1865. When three years old she was squeezd against a wall by a cart wheel, which struck her somewhere on the right side of the chest. No rib was fractured, and she soon recovered from the accident. About six years ago the patient noticed a slight swelling in her right side, which has since continued gradually increasing in size. On examination, a large deep-seated tumour was to be noticed occupying the right hypochondriac region, and extending considerably beyond, both above and below. Its boundary could be clearly defined inferiorly. It caused a considerable bulging of the ribs on the right side, and the right mammary gland was raised about three-quarters of an inch above the level of the left. Fluctuation was apparent. Dulness extended as high as the lower border of the second rib on the right side. The case was diagnosed to be one of hydatid tumour of the liver. The relationship that is agreed upon by helminthologists to exists between the hydatid and the tænia, and the known effect of the extract of male fern upon the latter, suggested to the author the treatment adopted. The extract is not miscible with alcohol or water, but it was ascertained that a liquid sufficiently thin for passing through a fine canula was to be obtained by admixture with a little potash. November 6th.—A fine trocar and canula were introduced into the tumour by Mr. Durham, and about four ounces of a limpid colourless fluid allowed to escape, in order to diminish the tension of the cyst. A liquid consisting of half a drachm (by measure) of the purified semi-fluid extract of male fern, half a drachm of liquor potassæ, and six drachms of water, was then injected into the sac, care being taken throughout to prevent the entrance of air. The fluid removed was examined, and found to be non-albuminous, charged with a large quantity of the chloride of sodium, and to contain hooklets of the echinococcus. At the introduction of the trocar the patient complained of experiencing a considerable amount of pain, which she referred to the lower part of the abdomen. Some febrile excitement, vomiting, and purging followed, but there

was no evidence of peritonitis. 10th.—On percussion, it was found that dulness did not extend so high in the chest on the right side by one rib as previous to the operation. 16th.—The patient was allowed to get up. 20th.—The tumour was found to be much diminished in size. It was much softer, did not extend so low down in the abdomen, and was much less distinctly circumscribed. The chest was resonant on percussion as low as the space between the fourth and fifth ribs. 29th.—The circumference over the most projecting part of the tumour before the operation was 34¼ inches; to-day it is 31¾ inches, showing a reduction of 2½ inches. Tumour very soft, and its lower border not to be defined as formerly. The patient, being well, was allowed to leave the hospital. A fortnight and again a month afterwards she was seen, and found to be progressing satisfactorily. May 10, 1866.—Since she was last seen the patient had suffered from an attack of rheumatic fever with heart complication and bronchitis. She had been in no way troubled with her side, and her circumference now was 30 inches. No swelling was perceptible to the eye, but a hardness remained in the hypochondriac region. The inference to be drawn from the result in this case is, that the injection of the extract of male fern caused an immediate destruction of the life of the hydatid without the production of suppuration, and that a rapid absorption of the fluid element of the cyst afterwards took place. —*Med. Times and Gaz.*, Sept. 29th, 1866.

—

19. *Elimination in Cholera.*—Prof. Lionel Beale discusses ably in two articles in the *Med. Times and Gazette* (Sept. 29 and Oct. 6, 1866,) the doctrine of elimination in cholera and briefly states the principal conclusions at which he has arrived as follows:—

1. That the gland-cell is not, as a general rule, destroyed when it secretes.

2. That the poisons "eliminated" by the skin and kidneys are probably in a state of solution.

3. That the poisons of contagious diseases are not soluble, but consist of living germs which move of themselves, but which cannot be "eliminated" from the blood by epithelial or other cells.

4. That so far from there being any evidence of the epithelial cells eliminating contagious poisons, the living particles of the latter interfere with the action of the cells, and many cells are destroyed by them.

5. That the function of the columnar epithelial cells is to draw substances from the intestine and pass them on towards the blood, and that therefore it is most improbable that these cells should take part in "eliminating" anything whatever from the blood.

[If these conclusions be just—and we believe them to be so—they are fatal to Professor Johnson's theory of cholera.]

—

20. *Treatment of Rheumatism.*—In a discussion at the recent meeting of the British Medical Association, brought on by a paper on this subject, Professor Bennett said that he understood the paper now read to advocate the good effects of quinia; and he should like to hear that brought out. It was some years since he had made any very careful trial of the alkaline treatment. It had occurred to him to ask, How long does rheumatism take to get well of itself? Until that point was settled, how could they determine what to do? He regretted that they had not had out that discussion on Dr. Stewart's paper on the previous day. Who could venture to say this or that treatment was or was not successful, if he did not know how long the disease was likely to last of itself. He had tried everything—there was no drug he had not tried—in rheumatism; and he found them all pretty much alike. He had tried nothing, and the result had been the same. He had tried the blanket, with the same result. They had given the alkaline treatment a most careful trial in Edinburgh, and it had seemed to him to shorten the duration of the disease a little. In Edinburgh, they saw a great deal of rheumatism in servant-girls, on account of the system of washing adopted there. Girls got up very early in the morning to wash, and in all weathers, without care as to clothing, they alternated carelessly between the hot steaming kitchen in which the washing was done and the open air, often bitterly cold, where they hung the clothes to dry. He thought

he had observed that, where a strong young girl of this sort was seized with rheumatism, the acute symptoms had a tendency to disappear in about six or seven days; and if there were much complication, it would disappear in about fourteen or fifteen days. If the girl were weak, they found that murmur at the heart for which formerly violent remedies—mercury and so on—were given. Then, as, under the influence of rest and good diet and warm, comfortable treatment, the patient became stronger, the murmur went away. In the old time, when mercury was given in these cases, it generally so happened that the murmur went away about the same time as the mercury touched the gums; and so it was concluded that the murmur went away in consequence of the mercury touching the gums. Now mercury was not given, and yet the murmur went away as soon. They had come to the conclusion in Edinburgh that, in one of the healthy cases he had named, if alkalies were used—they gave nitrate of potash—instead of being seven days, the average duration of the acute symptoms was six days and a half. He had given nitrate of potash regularly ever since coming to that conclusion. His view was that acute rheumatism cured itself. It had once been said that six weeks in bed was the best cure for everything; and he had noticed that, of Dr. Stewart's cases mentioned on the previous day, the average duration was forty-two days, which was just six weeks.—*British Med. Journ.*, Aug. 25, 1866.

—

21. *Chronic Albuminuria, originating during Convalescence from Scarlet Fever and other Eruptive Diseases.*—Dr. HERMANN WEBER read a paper on this subject before the Royal Medical and Chirurgical Society, in which he stated that his remarks do not refer to the well-known and easily recognized acute scarlatinal dropsy or desquamative nephritis of scarlet fever, but to a chronic form of albuminuria originating occasionally at a much later period, when recovery had apparently been established already for several weeks. The author related three cases of scarlet fever, unattended with albumen in the urine or any other symptoms of renal complication during the first four weeks from the commencement. The subjects of the cases appeared quite well at the end of about a month, when they returned to their usual mode of living; but about three or four weeks later the general health became disturbed (loss of appetite and strength, headache, glandular swellings, boils, anæmia, and occasional sickness), and the urine, as soon as the patients came under treatment was found highly albuminous. Perfect recovery took place in one case; while in another the general health became much improved, but a slight degree of albuminuria has remained; and in the third case death occurred seven years after the commencement from broncho-pneumonia, with uræmic symptoms, the post-mortem examination exhibiting waxy degeneration (amyloid) of the kidneys. The author maintains that the connection between the scarlet fever and the renal disease in this class of cases is not the same as in the acute scarlatinal dropsy; while the latter may be considered as a part of the scarlet fever process, the former, originating at a much later period, is probably only so far connected with the scarlet fever that through it a greater susceptibility to the development of chronic renal disease is effected, in the same way as there results a tendency to other chronic affections, like glandular swellings and eruption of boils. The author believes that the same tendency may be caused also by other acute diseases, especially those of an exanthematous nature, and gave two cases in which chronic albuminuria took its origin in persons who had lately recovered from erysipelas of the head and typhoid fever respectively, in both of which cases, during the febrile state and during the convalescence, the urine had been quite free from albumen. He referred also to a similar case occurring after typhus fever, and described by Dr. Johnson in his work on Diseases of the Kidneys (London, 1852, p. 408). The author was inclined to infer from such cases that amongst the many cases of Bright's disease the origin of which is uncertain, a not inconsiderable proportion may have been developed during the later stages of convalescence from exanthematous diseases; that, therefore, as urged already by Dr. Johnson with regard to fever, particular care ought to be taken during these stages with regard to diet, clothing, habitation, avoidance of over-exertion, and

exposure to cold and damp air. Dr. Weber further pointed out the insidiousness of the commencement of this chronic albuminuria, as, in four cases out of the five related, anasarca and admixture of blood with the urine were altogether absent. Lassitude, loss of strength, anorexia, swelling of the lymphatic glands, and eruptions of boils, being the principal symptoms, ought, therefore, always to lead to an examination of the urine, the more so as by an early discovery of the renal disease the chance of a perfect cure is much increased, as seen in two of the five cases reported.

The treatment consisted in attention to skin and diet; in the administration of iron which acidulated acetate of ammonia, and occasional doses of elaterium to relieve the kidneys, and in the use of the hot vapor bath or the warm wet sheet.—*Med. Times and Gaz.*, Sept. 29th, 1866.

—

22. *Training, or Forced Exercise in the Treatment of Diabetes.*—Professor BOUCHARDAT, while admitting the efficacy of alimentary treatment in diabetes, considers it only as palliative, and he recommends the adoption of energetic exercise. This idea is not a novelty on his part, as in former writings he recommended, in the case of patients affected with this complaint, the energetic action of their bodies and arms; and then he ascertained that labour in the open air always promotes the utilization of the feculent matters in diabetic patients. It is not sufficient in all cases to cause the disappearance of the sugar, but, all things being equal, in regard to the quantity of feculent matters absorbed and other conditions, a diminution in the proportion of sugar contained in the urine always coincided with exercise in the open air. M. Bouchardat gives an instance of remarkable success in the treatment of diabetes attained by this treatment, the diet being carefully regulated and the urine being examined at intervals. Although the patient may at first be very weak, the adoption of exercise will gradually give him strength. It is of the greatest importance, according to M. Bouchardat, to use the strength in proportion as it returns; and daily exercise of the body, arms, and legs is indispensable. The greatest care must be taken to find some daily exercise which is agreeable to the patient—as, for instance, in the case of men, hunting, rowing, fencing, skating, billiards, cricket, &c.—or any ordinary manual employment, as sawing, cleaving wood, turning, and the active work of gardening; and in women, all the active household employments, especially those which require the action of the legs rather than standing without walking. Riding in a carriage is not to be adopted except when no other exercise is possible; but riding on horseback is a salutary kind of movement, although it cannot be substituted for all the others. Of all the modes of exercise, that which is most convenient must be chosen; and it ought to be energetic, so as to produce a thorough sweating over the whole body; and then all necessary precaution should be taken to prevent the chance of chilling the system. M. Bouchardat relates several cases in which his system was successfully adopted in the treatment of diabetes; he considers the exercise of the gymnasium especially useful when such an establishment is well conducted, and he gives some rules to be followed by the patients. When the exercise has been continued for about an hour, and all the body is bathed in sweat, the flannel should be changed, and the skin washed briskly with cloths soaked in cold water, then strongly rubbed with coarse gloves or towels, or flesh-brushes. Then the body is to be struck and kneaded, so as to produce a complete reaction, which is sustained by a walk of a quarter of an hour at least, the body being protected by good woollen clothes. The skin should not be neglected while these exercises are used, and salt-water baths, either warm, or, what is better, cold, if they can be borne, are, according to M. Bouchardat, of almost invariable utility. During the treatment the diet must be carefully regulated, glycogenic substances being avoided while the urine is diabetic, and resumed only when the sugar has disappeared. The red wines of Bordeaux or Burgundy may be drunk; but sparkling wines, like champagne, should be avoided. Coffee and tea, without sugar, are sometimes suitable, but their employment must be regulated by the condition of the urine after they are taken.—*British and Foreign Medico-Chirurgical Review*, Oct. 1866, from *Bulletin Général de Thérapeutique*, Dec. 30, 1866.

23. *Change of Type in Disease.*—Dr. Symonds has ably discussed this subject in a letter addressed to Dr. Markham, published in the *Med. Times and Gazette*, Oct. 6, 1866. We give a few extracts from that letter:—

"Why has this powerful remedy [venesection] fallen into comparative disuse? My answer would be prompt and unhesitating: it is because, under my own observation and the observation of many of my medical brethren in various parts of the country, inflammations have become less frequent and less violent, and when they have occurred they have been accompanied by a condition of the whole body that has not borne much depletion or lowering by any measures, and has often required a speedy use of stimulants. Nearly thirty years ago the attention of the profession was directed by Dr. Stokes,[1] in words which I have never since forgotten, to that stage in inflammatory cases when stimulants must take the place of antiphlogistic remedies. Now, that stage in my early experience used to come only after a long persistence of the opposite condition. But when the 'change of type' in inflammatory cases became manifest, it was, among other signs, betokened by this particular fact, that the state of depression came on much earlier than formerly—nay, that some cases began where others used to end. * * *

"One word, before closing this long letter, on the *à priori* argument for or against what is called change of type in disease. It seems to me that all analogy is in favour of the probability that in different eras human beings should be differently affected by such an agency as abstraction of blood. When the practice of it was most common, limitations were always kept in view as to the subjects to whom it was applicable, and the degree to which they could or could not bear it. Every practitioner knew that there were persons in regard to whom it was necessary to exercise great caution, and others who by circumstances of age, or habits, or previous disease, or by idiosyncrasy, or by what was termed "the epidemic condition," were altogether unfit for the remedy. If this held good as to individuals or limited classes, I do not see why it might not prove true of great numbers—nay, of the majority of the community—as in late years and at the present time. If over at least two decades of years there has been a remarkable prevalence of epidemic catarrh followed by a great variety of neuralgic disorders—if there are times when boils and carbuncles become rife to a degree unknown for one or two generations—if diseases so characterized by asthenia as diphtheritis come and establish themselves as new calamities—I do not see why inflammations may not in certain periods of time assume peculiar aspects, especially in regard to the subject which we are reviewing. I cannot consent to discuss inflammations in relation to our present inquiry as if they were definite organisms, like objects of natural history. Even allowing that pneumonia, or meningitis, or peritonitis, is the same in Peter as in Paul (though this is quite open to question), yet when we have to consider the cure of these diseases, especially in their acute forms, we of course really have to consider the cure of the men, women, and children afflicted with these diseases, and in whom the local inflammations may, over various periods, be attended with conditions of the whole body as peculiar to the time as those which are presented in furuncular, and catarrhal, and choleraic or other epidemics. As to some of these, it may be alleged, with less or more of probability, that, apart from alterations in human diatheses, there have been importations or developments of new seeds of diseases, surmised germs, or cells, or ferments; but even these hypothetical agents would hardly cover all the cases in which certain disorders become rife at particular times. What successions or conjunctions of agencies from air and vapour and the imponderable forces of nature, or what malarious emanations of the earth, or what changes in food, and habits, and clothing, and occupation, may bring about certain changes in human constitutions in particular times, so that inflammatory diseases shall be more asthenic and less fit for treatment by abstraction of blood, we cannot pretend to conjecture. But there is no *à priori* improbability that such causes have been in operation. Just about twenty years ago a terrible epidemic—terrible because of the famine it brought upon a whole people—attacked the potato plant. There were suppositions of insects, or fungi, or of some morbific materies imported; but, however much or little truth there may have been in those conjectures, it is but too obvious that the plant shows at the present epoch an asthenic constitution to such a degree that if the summer and autumn prove more rainy than usual, the plant is less able to bear the evil influence of the weather than in old times, and that it sickens in its leaf and decays in its tuber. Would that we could suppose the human body to be impregnable to analogous influences? * * *

---

[1] In the chapter on the Treatment of Bronchitis in his masterly treatise on Diseases of the Chest, p. 114.

"One word more, and I have done. It has been my lot to observe diseases in different parts of England, and to compare my observations with those of other physicians, and one of the results of my experience (it was long before 'change of type' came to be discussed) was that inflammatory cases were more sthenic in some districts than in others. If this experience may be trusted, and if, under the outward agencies operating in certain districts, diseases can be more or less characterized by strength or debility, is there not a probability that, in the ever-shifting combinations and sequences of meteorologic and other influences in successive periods of time, the whole population of a country may present varying phases of disease in general, and of inflammation in particular?"

SURGICAL PATHOLOGY AND THERAPEUTICS, AND OPERATIVE SURGERY.

24. *Development of Epithelial Cancer in Internal Organs.*—Dr. C. OTTO WEBER says that secondary cancroid deposits are found in internal organs much more frequently than is believed. His researches have been made chiefly in the liver and lungs. The epitheliomata in internal organs, he says, are developed at the expense of the nuclei of the interstitial connective tissue and not of the proper epithelial cells of the organs. He gives several instances of the coexistence of epithelial cancer and tubercle in the same organs. From experiments on animals, Dr. Weber is led to conclude that these secondary cancers are developed like metastatic abscesses. They do not arise from cells detached from the original cancer and carried along in the circulation; but the embolus exerts some inexplicable catalytic influence, and its presence determines the excessive growth of nuclei of connective tissue, with the result of forming a secondary cancer.—*Gaz. Méd. de Paris*, June 16, from *Virchow's Archiv.*

25. *Results attending the Removal of the First Growth of Cancer.*—Mr. JOHN BIRKETT, Surgeon to Guy's Hospital, in an interesting communication read before the British Medical Association at its meeting in August last, presented the results attending the excision of the entire mammary gland, or a part of it, when involved with a cancerous growth. "He is obliged," he says, "to do this without taking into consideration many collateral circumstances of very great importance; such as the condition of the integuments, of the axillary lymphatic glands, the duration of the growth, the progress made by the disease in each individual case, the variety of the disease, and other points. The above, singly or collectively exert much influence on the result; but it would occupy too much time to enter upon these important details at this meeting."

With a view to answer the question, What advantage does a patient obtain by submitting to the removal of a cancerous tumour? Mr. B. gives the results of his investigation of one hundred and fifty cases carefully recorded by himself. A majority of these patients are dead, for the investigation was commenced eighteen years since. No selection of cases was made. "These statistical tables and deductions therefrom by means of averages afford," Mr. B. admits, "fallacious guides to treatment.

"Table A is arranged to show the length of time during which 150 patients